THE ROLE OF BUSINESS PROCESS VIRTUALIZATION IN YOUR BUSINESS

Remember the halcyon days of the dot-com boom? They were the modern equivalent of the gold rush of 1849. Nothing seemed impossible, and absolutely everything generated money. Now, bumper stickers lament, "Just one more bubble, Lord!"

Just like the gold-rush days, the dot-bomb left its trail of broken dreams and ghost towns. Unlike the gold rush, though, the dot-bomb left behind a glittering new set of technologies and highways throughout the business world. In gold-rush terms, the dot-com/dot-bomb era is the equivalent of building an interstate highway system to the gold deposits, building vast new cities to process gold and handle commerce, and then just walking away from it all when the bust comes. However, a few hardy miners are left. This book outlines the research we have done to locate a few of these pioneers in the new age of technology-enabled business.

Like most technology-savvy managers today, you probably have read numerous books that promised to show you the way to unlimited success through the application of technology. This book is different. This book is not an advertisement for new and more-expensive professional services. It is a primer on how you can apply the tools that presently exist in your inventory in new ways to virtualize your business and increase profitability.

IBM coined the term *virtualization* to describe the process of outsourcing. Although outsourcing is a hot topic in current cash-strapped enterprises, this book does not discuss shipping internal work to external providers, whether on-shore, near-shore, or off-shore. The reference in this book is to the process by which physical infrastructure, representing sunk costs, can be replaced with electronic infrastructure, representing a dynamic business environment. This book also talks about a fundamentally new way of working with and managing employees, many of whom might not be employees in the traditional sense. This process is called *business process virtualization (BPV)*. In this book you will explore through exposition and case studies the technologies and the application of those technologies that can radically change the cost structure, balance sheet, profit and loss, and business practices of firms of all sizes.

Many or most of these technologies probably exist within your company today. The focus of this book is on how you can leverage your existing information technology (IT) infrastructure to do new things and create practices aimed at improving your bottom line. You might lack time to develop a vision and rationale

for taking the leap into the world of BPV. This book helps you develop the vision and provides, unequivocally, the rational for making the foray into BPV. Companies around the globe are cutting back on IT spending and personnel in an effort to improve their bottom line. We closely examine the logic behind these actions, and we demonstrate throughout this book that the problem lies in the reasons companies apply technology to business, not in the technology itself.

The business paradigm of the 20th century was one of centralized organizations using a management hierarchy. The majority of employees were located in a single facility, and management acted as command central. This was a good model for economies emerging from an agrarian economic base. It allowed for a relatively smooth transition from field work to desk work.

As conducting business has become more and more complex through supply chains, just-in-time deliveries, and electronic order processing, the technology we have applied to addressing the complexity has only exacerbated the situation. Why? Because the technology, designed on a distributed client/server architecture, has been applied to enable centralized management. Technology has been used to concentrate people and data rather than enabling the geographic distribution of critical corporate assets.

The dynamic of centralizing business assets, including personnel and intellectual property, is so ingrained in the business mind-set that questioning the legitimacy or business costs of the practice borders on heresy. Companies that routinely spend millions of dollars on legal counsel and that worry about enacting policies designed to protect critical intellectual property discount the fact that many of their key personnel spend up to four hours each day commuting. How acceptable is such a commute should a fatal accident wipe out all the intellectual property stored in the brain of a CEO, strategic planner, or key scientist?

The fact is, modern business runs on intellectual property, and intellectual property is created when people interact. The command-and-control business model, one developed in the context of the Industrial Revolution, with deep roots in the 20th century, nodded in the direction of centralized business when it sought to place people in close proximity within corporate walls. Block after block of looming skyscrapers creating glass, cement, and steel urban canyons are the ultimate expression of centralized business.

The old model is suffering from numerous age-related problems, not just an outdated notion of work management. It is becoming increasingly difficult to

achieve proximity of desired brains. The best people might not be willing or able to devote four hours each day to getting to and from work. The best people might not even be within commuting distance of the office. When these people do come into work, modern technological endeavors in the form of skyscrapers and cubicle mazes ensure that they spend a significant chunk of their time each day attempting to locate the correct people or data that they need to complete their work.

Additionally, as specialization continues to drive areas of expertise, it is likely that a particular skill set might be vested in one individual or a small group of individuals—in Bangalore, India, perhaps. When such expertise is contentedly located outside an urban setting, the individual or individuals might not want to move away from their perceived paradise. The people possessing the critical skill set might not even want to work a 9-to-5 workday. However, tapping into that expertise might be the difference between a firm's survival and failure in the current hypercompetitive markets.

In his book *The Structure of Scientific Revolutions*, Thomas Kuhn noted that paradigms change when the old way of doing something fails to address evolving problems.[1] Joel Barker, in his *Paradigm* book and lectures, notes that people immersed in a particular paradigm rarely understand the need for a new paradigm, and in fact usually actively oppose the emergence of a new one.[2] Paradigm stagnation is the ailment that businesses of all sizes are facing today. Rather than adopting a new paradigm, businesses continue to pursue the actions and activities of an old paradigm that no longer supports the new dynamic business environment in a futile attempt to improve revenues and cut costs. Unfortunately, this includes the cutting of critical personnel, with their embedded intellectual property, when the market turns bearish. What, they should be asking, happens when the bulls return? The old paradigm has served its purpose, but as the markets evolve, becoming more global and real-time in nature, a new, more-robust model must evolve with it.

But what is the new paradigm? As noted earlier, this book identifies and defines the new business order of business process virtualization and illustrates through comprehensive case studies its numerous significant advantages over the old centralized command-and-control method of conducting business. In the process, this book demonstrates that because of new, widely implemented technologies, this paradigm shift does not have to be a flash cut, with all the social disruption that entails. Rather, the new paradigm can be incrementally integrated into the existing paradigm infrastructure.

Ultimately, BPV will supplant the centralized method of conducting business. The book provides plenty of case studies to examine businesses that have firmly set their path toward implementing the new paradigm, the benefits they have gleaned along the way, and how these benefits are driving additional migration to the new business model. The cases examined are Cisco-centric. The intent of the case studies is to show that business process virtualization can be applied to any size company within any industry.

BPV formalizes a notion that has been around for a while: constant change. BPV should consistently reflect the change a business goes through to obtain and retain a competitive advantage. BPV is focused on business changes enabled through the focused application of technology. Although change-focused enterprises have always existed, even some whose focus was on technology-enabled change processes, BPV is driven by a whole new dynamic. BPV emphasizes that change can be made less painful and made to happen more swiftly, with fewer personnel impacts, than traditional business management approaches. But what is BPV, specifically?

What Is Business Process Virtualization?

Figure 1-1 illustrates the concept of business process virtualization and the ease with which it can be implemented incrementally.
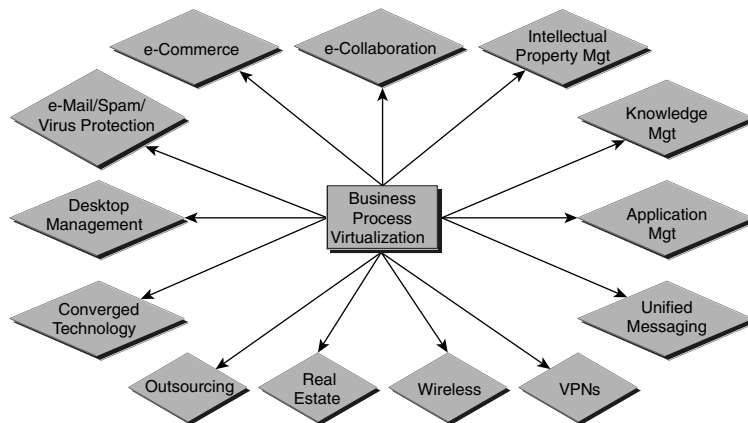

Figure 1-1   *BPV Includes Many Different Technologies and Considerations*

BPV is the application of intelligent network-enabled automation to leverage what you already have—people and their intellectual productivity, capital, and infrastructure/real estate—to achieve quantum improvements in productivity, profitability, and competitiveness. BPV, like any good paradigm, has existed for a long time. It began when the first clerk exchanged quill pens and vellum for a typewriter and fax machine, allowing him to work outside a centralized environment. In its modern incarnation, BPV can be traced to the general deployment of the PC and the Internet.

BPV is not just about technology. It is derived from the application of a new approach to management, a new focus by IT professionals, a new focus by corporate oversight, and enlightened involvement by many of the traditionally passive (or disruptive) business support activities.

BPV is not about telecommuting or teleprocessing or any other kind of "tele"-hyphenated construction. Although telepresence is one aspect of BPV, it is not the whole story. BPV is the application of technology in the context of a single individual, a team, a department, or a company to improve efficiency. BPV encompasses the technology of yesterday, today, and increasingly tomorrow to render the bricks-and-mortar in the traditional business irrelevant.

Of course, similar claims have been made repeatedly for each advance in the area of business automation. However, what distinguishes this shift from others is that, for the first time, technologists are not independently driving the paradigm shift. The free-market economy and competitive forces are driving business process virtualization. Reality has insinuated itself into the technology cycle with profound results. Many companies, some of which are reviewed in this book's case studies, are beginning to get it and are reaping the rewards of doing so. To see why these companies' successes represent a sea change, it is only necessary to see why technology, left to its own devices, is not the answer.

The Role of Technology

Technology by itself is a loser's game. That is, it is a loser's game when played for its own sake. For many years companies treated technology, especially business technology, as though it were a subsidized game for technicians. Before the dot-com bubble burst, companies were buying the latest bleeding-edge technology with few, if any, serious questions about what value the technology

would bring to the company. It is unfortunate that the lesson many took away from the dot-com collapse was the lack of virtue in networked technology. The technology was not to blame for the dot-com failures or the collapse of the telecommunications market. The lack of a good business case for technology acquisition and implementation was at the root of these failures. It is ironic that the technology merely accelerated and magnified the poor business dynamic.

BPV depends on technology. The application of powerful computer platforms, combined with enabling software and high-capacity networks, provides the fabric with which to weave virtual business infrastructure. Rather than constructing buildings, BPV allows for the construction of global virtual structures, with very compelling financial implications. For example, only a few years ago, most call centers were housed in large, centralized cubicle farms. Now many contact centers are staffed by home workers who might not even know what their boss looks like.

Generally accepted accounting principles state that a building's depreciation period is 50 years. That of a desktop computer is 3 years. In that depreciation window, the business uses the investment as a tax write-off, but no one questions the business value of the real estate investment against other investment opportunities in the first place. All companies have only three assets from which to grow their business: land, labor, and capital. What if a company never made the real estate investment in the first place? Instead, what if the investment the firm made was in increasing its reach? Also, what if the incremental investment the firm made in technology (technology always costs less than its equivalent in fixed infrastructure) had an accelerated write-off period so that the firm could quickly replace it and continue to improve efficiencies? Put another way, which would a business rather do—invest in sales or invest in buildings?

The technology of networked automation lets companies of all sizes place in close proximity (in a virtual sense) the people, information, and intellectual property on which the business's future depends. The result is intellectual property created at accelerated rates. And, if the corporate capital resource is not going into maintaining sunk land assets, the capital can be used to acquire or support more labor, increasing the likelihood of good ideas.

The point is that *any* business process that depends on fixed assets can be improved, accelerated, and virtualized through the application of IT. Contact centers and manufacturing processes are two functions requiring fixed assets that lend themselves nicely to virtualization. The economics of cost containment is the

hook that entices businesses to virtualize a function. However, the ongoing competitive advantages are what encourage them to continue virtualizing additional processes and functions within a specific process.

The Role of Executive Management

Technology by itself can never achieve a virtual business process. For that, firms need executives who can manage in an entirely new way. What businesses need is a focus on process rather than people.

Since the development of scientific management theory by Frederick Winslow Taylor during the mid-1940s, management has been focused primarily on the management of people and the work they do.[3] Although this has evolved into multiple variations, such as empowered teams, the fundamental focus has been on how best to control people. This is even true of white-collar workers. How many mid-level managers keep in the back of their minds the notion that higher authorities are subtly monitoring their comings and goings? Books have even been written on the subject of being in the office during strategic periods of the day.

An emphasis on *what* people do loses sight of the fact that it is *how* people do their jobs that matters. Although the output of professionals does have meaning, output is controlled through contract. Improvements in process efficiency lead to increased productivity and subsequently lower costs. As economic conditions tighten, executives lose sight of this fact. The knee-jerk reaction is to turn the screws on already overtaxed workers, resulting in reduced morale and output.

BPV requires a different focus entirely—a focus on process improvement through the use of networked technology. Of course, if BPV enables such work approaches as telecommuting and collaboration at a distance, the manager cannot see *what* the workers are doing. At some level, the output becomes the focus, regardless of how much actual work goes into producing it. Managers in a BPV environment have to resort to a project management focus, the output, to ensure that the mission is accomplished.

It is not just the focus of management with respect to worker management that must change. Executive management must adopt a new perspective on the decision-making process. As the dot-com bomb illustrated, the days of empowering managers to make decisions merely because you think they will

make good ones is over. Decision theory has been loosely practiced for several decades. Its principles are well known and easily applied to the process of optimizing decisions. BPV includes the application of business intelligence, gleaned from a company's operations, to optimize business decisions. BPV, in conjunction with some simple rules for thinking about business decisions, can radically change a company's response to changing market conditions. BPV, as a result, has the potential to provide the enterprise with the nimbleness associated with small startups. BPV makes it possible to turn the Queen Elizabeth cruise liner in the same distance as a rowboat and, just as importantly, in the same amount of time.

The implications of BPV's effect on a business are profound, for both managers and employees. Although the manager needs to make some serious adjustments to the way in which work is accomplished, the biggest adjustment is required from the workers. Employees need to become self-managed and, to a certain extent, self-sufficient. Managers cannot be baby-sitters in a BPV-enabled workplace—nor should workers expect them to be.

The Role of Information Technology Implementers

It is not just management and employees who need to make adjustments. IT professionals need to divest themselves of the expense/overhead mind-set and accept the role of primary business enabler. IT should be a powerful voice at the level of corporate governance. If this is not as a CXO, this person nevertheless should have easy access to those who make the fundamental business decisions.

Since the dawn of the Information Age, IT has adopted and maintained the role of "keepers of the holy of holies." The old idea of lab-coated acolytes prostrate at the altar of the mainframe computer was not far off the mark. A certain mysticism has always been associated with IT. As a consequence, the emphasis has been less on increasing revenues and more on just "keeping the damn thing running." (Some people take exception to the notion that business has evolved past the Information Age. In fact, business has just emerged from the Data Age and is making its first tentative steps into the Information Age—but more on this later.)

IT can no longer afford such an approach. In the first place, useless baggage in the form of excess staffing and islands of technology, no matter how much it

glitters, can no longer be tolerated as companies struggle to survive. In the second place, IT might be the only hope for struggling businesses attempting to maneuver in markets characterized by hypercompetition and ruthless cost-cutting.

IT is the mechanism by which BPV is accomplished. Although the networked technology that is the basis of BPV is becoming more intelligent and easier to implement all the time, maximum advantage can be achieved only when this technology is applied in the most advantageous way. This takes solid technology planning. This takes IT.

However, it takes a different kind of IT. It takes IT that is focused on strategic planning, not operations. Operations is becoming a high-cost overhead that businesses are increasingly loathe to support. In a competitive market that is driven by a price-to-cost dynamic, the highest-cost competitor always loses. This dynamic includes internal enterprise IT organizations.

IT must focus on the highest-yielding short- and long-term activities. High-yielding activities require firms to evaluate the company's business processes and find ways to apply technology to build virtual business processes. This is something that is hard to outsource effectively. When it is outsourced, it always costs more than if you had an internal team, properly empowered, perform the strategic planning functions.

The Role of the Board of Directors

Corporate governance is under extreme scrutiny. The debate over whether proper fiduciary responsibility would have stopped so many large companies from imploding is not the issue. As companies move into the age of virtualized business, the focus is not on whether the activities of the past were dysfunctional, but on what the appropriate role for boards of directors should be in the emerging era.

A board of directors is fundamentally an oversight panel that is placed in the corporate hierarchy to look after the shareholders' interests. The intent is to provide a balance and, most importantly, a check on the CEO's power. In this role, the expectation is that there will be an acute interest in the firm's cost and revenue dynamics. As a result, it is reasonable to expect that corporations will seek to place technology-literate directors on their boards so that when the question of whether to invest in automation is debated, there are people on the board who are capable of exercising rational levels of control and oversight.

Boards of directors who are merely friends of the CEO or who are CEOs providing a reciprocal favor in exchange for similar considerations by their own boards will no longer do. This is especially true if the board must provide governance in a technical domain. When a company is highly virtualized, with complex automated business processes, governance can no longer be symbolic. It must be intelligent and acutely conversant with technology.

Other Roles

Management, IT, governance, and labor are not the only constituents in any organization. What about the traditional support functions? How will issues such as intellectual property management, liability, and the various labor laws be administered? The simple answer, as we will illustrate, is that mostly they will not be!

In other words, to the extent that such functions were dependent on centralized command-and-control activities in the past, in a virtualized business world such functions are relegated to and built into the processes by which work gets done.

It is important to understand what is meant by the term intellectual property (IP). In most businesses, IP is whatever the company has created but for which it has no immediate need. In large corporations, substantial legal staffs are kept busy trying to devise ever-more-complex rules to prevent the leakage of such IP into the business community. Of course, IP is valuable only if it is used, and it has an amazingly short shelf life. Rather than imposing the burden of rules and regulations, administered by several levels of management, and ultimately directed by very expensive lawyers, what if IP was cataloged automatically when it was created, and was used quickly and frequently, but was not managed otherwise? Can this model work? As we will demonstrate, the answer is a resounding "yes."

Legal staffs in such a setup would be redeployed to enable IP transfers and utilization rather than attempting to build walls around and within the company. Of course, the legal team would be a much smaller group within an organization.

What about the human resources (HR) functions? HR is basically an artifact of management's desire to control employees. Rarely is this group trained to identify a strong candidate for any role within a firm beyond entry-level positions. In most

cases, HR is associated not with helping employees but with control and termination functions. In the current market, the HR function of fulfilling key roles within a firm has already moved to virtualization via executive recruiting firms.

When a business is totally virtualized, employees are essentially free agents working under contract. There's a nominal need for HR functions. Where this process does exist, it can easily be automated. Contractors can be set up with full access to the requisite systems, benefits, and support services (many of which are outsourced) automatically on project initiation. They can be unplugged just as easily when the project ends. HR, such as it is, can be an outsourced function and can be directed toward building services people want.

As noted previously, the focus of all this employee control isn't necessary. Employees, for the most part, aren't permanent staff members. They are self-managing free agents with skills to sell. To imply that these workers are essentially white collar is incorrect. White-collar work, with its implication of being part of a command-and-control structure, misses the point. Neither is it correct to infer that they must, then, be blue collar in their orientation, with an expectation of narrowly focused work, with no responsibility to think creatively. The new workforce fits a new dynamic: They are highly motivated, exceptionally creative, and self-directed. They take responsibility for their work and their support, but they might be part of a union.

BPV leads to profound changes in organizational dynamics. BPV mixes up the notions of what constitutes management and what constitutes an employee, and it calls for a different sort of economic model. The change is so profound that you might be tempted to conclude that making the jump to a virtualized company is a daunting, expensive, and time-consuming task. That would be an incorrect assumption.

What Is Incrementalization?

BPV is a process in itself. It is not a flash cut to a new business model. In fact, it can't be. Because the changes are so profound, BPV is achieved in increments. This is the good news of BPV. It can be achieved one step at a time, and each step can yield significant benefits. The benefits are not isolated, but are cumulative. The total is substantially greater than the sum of its parts.

One Process at a Time

Consider the typical enterprise, composed of dozens of departments and hundreds of workgroups. Each of these workgroups has defined multiple work processes. In many cases, these processes are part of company-wide business processes, but a large percentage of these work processes are particular to the group. These processes also are highly manual. They can range from the procedures for approval of work to the ways in which people collaborate and document what they do.

Each of these processes can be automated to varying degrees; in some cases they can be virtualized so that they become location-independent. Each of these conversions can be justified on the basis of an immediate timesaving benefit. Ultimately, the virtual process of one group or many groups can be stitched together to form virtual departments and, ultimately, virtual companies.

The point is that each individual process can be virtualized incrementally without waiting for some grand scheme to answer all the questions associated with virtualization at an enterprise level. However, this isn't the only way to think of incremental improvements.

Horizontal Incrementalization

Consider the business processes that cut across multiple departments. These are typically associated with service delivery, engineering, time management, and accountability. In these cases, BPV can be applied to such processes to accelerate the flow of information and to improve communication between groups. BPV can also be used to facilitate the inclusion of groups that might not ordinarily be included in a process because of geographical separation or other factors.

Horizontal incrementalization typically involves investments that are larger and systems that are more complex than those applied to individual group processes but that can be a logical adjunct to them. As noted, when sufficient numbers of workgroups are virtualized, it makes sense to tie them together with higher orders of BPV. If the groups work together in different departments, horizontal incrementalization yields excellent returns. This doesn't mean virtualizing the entire enterprise; rather, it means an incremental, stepped approach within target workgroups or departments where positive economics can be demonstrated.

Vertical Incrementalization

Vertical incrementalization, like horizontal incrementalization, merely extends BPV from the workgroup. However, whereas the focus of horizontal incrementalization is on the business process between groups at an equivalent level of responsibility, vertical incrementalization focuses on extending the virtual workspace up the reporting hierarchy within the same division.

Vertical incrementalization is the process of upscaling incrementalization as successes are achieved in specific work processes. For example, a workgroup could implement document management to rationalize the process of manipulating and using documents. Once stable, this could be augmented with desktop management to rationalize and improve the use of individual desktop environments. Ultimately, this could be extended to the development of a completely virtual work environment.

Vertical incrementalization is actually BPV's most powerful principle, because it is how an organization can ultimately achieve the highest degree of virtualization. As control becomes vested in automation rather than in interaction of management layers, the actual location of management and workgroups becomes less important. Ultimately, the process itself is the control structure, with management focused on process rather than people.

What Is Technology's Impact on Business Models?

The technology that was the enabler of the dot-com bubble is the most profound development in the business world in the last 100 years. In response to the needs of dot-com companies, networked computing technology achieved a quantum leap of improvement as well as implementation.

Why Alan Greenspan Was Only Partially Correct with "Irrational Exuberance"

Near the pinnacle of the dot-com era, Alan Greenspan made what was to become a famous speech at the Annual Dinner and Francis Boyer Lecture of the

American Enterprise Institute for Public Policy Research in Washington, D.C., on December 5, 1996. He made headlines with his comment that the stock market's exponential increase was because of "irrational exuberance." From a current perspective, it is easy to say that he was correct. However, this is only partially true, and Mr. Greenspan was only partially correct.

As to whether the market valuation was based on uninformed enthusiasm on the part of investors, we can hardly debate this notion. If any proof were required, it would be the depressed state of affairs that followed the dot-com bust, where even highly rated companies having significant current and projected cash flow were trading just above junk bond status. If investors were uninformed on the upturn, it is clear that they are grossly uninformed on the downturn. Mr. Greenspan was correct about the psychological basis for market overvaluation. However, he was incorrect in his implication that the impetus for that psychology was unwarranted.

Network technology, from the Internet to advanced telecommunications capabilities such as unified messaging and video teleconferencing, was perfected during the dot-com bubble. Network technology was perfected to the point where it is widely available today to apply to conventional businesses of all sizes and markets. However, where many of the dot-coms were built on poor business models, with few to no customers, conventional business has an established customer base, revenues, and existing competition. Applied intelligently, network technology can reduce the cost structure and improve the speed of operation of these conventional businesses. Where Mr. Greenspan saw only irrational exuberance and poor business models, we see the enabling technologies for the next big expansion, and complete transformation, of the American economy.

Technology and BPV

The point of technology within any company is to improve the way in which business is done so that productivity and revenue can increase, costs can decrease, and the quality of working people's lives can be improved. In that sense, this book shows you how BPV technology can work for you in your business and within your workgroup.

This is a wake-up call to all businesses. Profound things are happening; the paradigm for business has shifted. Those who recognize the signs and adopt the new paradigm early will have significant opportunities and competitive advantages. Those who wait might have no business future at all. BPV has the potential to accelerate business so extensively that enterprises adopting it will become much more agile and nimble. By the time nonenabled companies recognize the threat, the BPV-enabled firms will be in a market-dominating position.

This book is also a primer on how to make good decisions. Through each of the case studies, we will step you through BPV's rationale, technology, and real-life applications. In the process, you will be asked to think carefully about how technology is applied in your company. Each chapter concludes with a case study on the application of specific Cisco solutions to real-world business problems. Each case is framed in terms of BPV principles and is organized around a structured decision process, as shown in Figure 1-2. The case studies and analysis will give you the appropriate tools to replicate a similar decision process within the context of your own business environment.
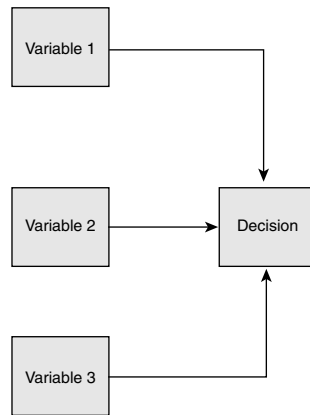

Figure 1-2 *Structured Decision Model*

The fundamental concept behind BPV is economic. Change when initiated only for the sake of change (Tom Peters notwithstanding) is rarely successful in improving the business. Only when a change has proven to drive cost reduction, improve efficiencies, or increase revenue will it last and enable additional changes.

BPV, then, demands measurable improvement in the company's finances as it is applied. Caution is the key word; however, getting on with it is the key dynamic.

BPV is here today and is being implemented in a variety of arenas. Improved processes are the reason to apply technology in the first place, and BPV is the framework within which enterprises can rationalize their ongoing technological deployments. BPV does not demand radical thinking from decision makers, but it does ask that they think about the impact of networked technology as they make their plans and evaluate investments.

The path to enlightenment starts with a lesson. The next chapter explores why the conventional business model is no longer valid and how the dot-bomb made this clear.

Summary

- The dynamic of centralizing business assets, including personnel and intellectual property, is so ingrained in the business mind-set that questioning the practice's legitimacy or business costs would border on heresy.

- The fact is, modern business runs on intellectual property, and intellectual property is created when people interact.

- Paradigm stagnation is the ailment that businesses of all sizes face today.

- Business process virtualization (BPV) is the application of intelligent network-enabled automation to leverage what you already have—people, capital, and intellectual property—to achieve quantum improvements in productivity, profitability, and competitiveness.

- The free-market economy and competitive forces are driving BPV.

- Technology by itself is a loser's game.

- The application of powerful computer platforms, combined with enabling software and high-capacity networks, provides the fabric with which to weave virtual business infrastructure.

- An emphasis on *what* people do loses sight of the fact that it is *how* people do their jobs that matters.

- BPV includes the application of business intelligence, gleaned from the company's operations, to optimize business decisions.

- Information technology (IT) professionals need to divest themselves of the expense/overhead mind-set and accept the role of primary business enabler.

- As companies move into the age of virtualized business, the focus should not be on whether the activities of the past were dysfunctional, but rather on what the appropriate role for boards of directors should be in the emerging era.

- In the current market, the HR function of fulfilling key roles within a firm has started moving toward virtualization via executive recruiting firms.

- Employees, for the most part, won't be permanent staff members. They will be self-managing free agents with skills to sell.

- BPV can be achieved one step at a time, and each step can yield significant benefits.

- Where Alan Greenspan saw only irrational exuberance and poor business models, we see the enabling technologies for the next big expansion, and complete transformation, of the American economy.

- The point of technology within any company is to improve the way in which business is done so that productivity and revenue can increase, costs can decrease, and the quality of working people's lives can be improved.

References

[1]Kuhn, Thomas. 1962. *The Structure of Scientific Revolutions*. Chicago, Ill.: University of Chicago Press.

[2]Barker, Joel. 1989. *Discovering the Future: The Business of Paradigms*. St. Paul, Minn.: ILI Press.

[3]Taylor, Frederick Winslow. 1967. *The Principles of Scientific Management*. New York: Norton.